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ABSTRACT

This four-part paper on competency-based teacher education (CBTE) in Michigan contains the following sections: (a) the development of CBTE in Michigan, consisting of a chronology of events dating from 1971, and a listing of CBTE grants programs in 1974; (b) a survey of CBTE programs in Michigan, including an overview of the programs and status reports from Michigan institutions; (c) a working draft of a proposed plan for CBTE and other alternative teacher education programs, providing a CBTE definition, goal statement, and descriptions of state role, certification pattern, delivery system, support mechanism, regulation changes, and management plan; and (d) CBTE and certification definitions, with CBTE elemental definitions, criteria used to assess the degree to which programs are competency based, characteristics of competency-based instruction, a synthesis of CBTE definitions, a sample profile of the degree to which particular programs are competency based, a synthesis of CBTE certification definitions, and a state assessment model. (JCW)

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COMPETENCY-BASED TEACHER EDUCATION IN THE STATE OF MICHIGAN - 1974

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THE DEVELOPMENT OF COMPETENCY-BASED TEACHER EDUCATION IN THE STATE OF MICHIGAN

PART I

A Chronology of Events

August 11, 1971	State Board approves funds for the development and implementation of a systems approach for vocational teacher education based on terminal competency objectives. This is a three year project in the Department of Vocational and Applied Arts Education (VAE) at Wayne State University.
October 19, 1971	Position paper "Teacher Competencies and Michigan Certification" submitted to State Board of Education.
October 26, 1971	State adopts motion to: (1) Approve in principle actions to develop a performance or competency-based certification system which could replace the present Certification Code requirements for program completion based upon college credits, as proposed on page 13 of the position statement of October 19, 1972; and (2) seek an initial appropriation of $30,000 for consultant services, clerical help, and CSS&M for activities the first year to begin the development of a competency-based teacher certification system.
November 17, 1971	The State Board approves funds for the second year of the Wayne State VAE competency-based project.
November 29, 1971	Michigan teacher preparation institutions invited to submit expressions of interest with cooperating schools for the development of competency-based teacher preparation programs for funding under the Education Professions Development Act, Part B-2, State Grant Program.

January 25, 1972	Letters of invitation sent requesting concept papers leading to proposals for funding under EPDA B-2.
April 25, 1972	State Board approves joint institution-public school projects and awards EPDA B-2 grants for 1972-73 to the Lansing School District-Michigan State University and Pontiac Public Schools-Oakland University projects.
December 19, 1972	The State Board approves additional funds for the second year of the Wayne State VAE competency-based project.
February 27, 1973	"Progress Report on the Development of Competency-Based Teacher Preparation Programs in Michigan" submitted to the State Board.
	Competency-based teacher education programs in Michigan report on progress, also report on state of Florida. Five institutions and a total of seven CBTE programs in operation at this time.
	Report of Superintendent- "Higher Education Planning and Coordination as Related to Teacher Preparation and Professional Development" presented to the State Board.
May 8, 1973	"Report on Teacher Preparation" submitted to State Board. Recommends that $100,000 be provided to support grants for the expansion of existing competency-based program models.
May 29, 1973	State Board receives and approves report on "Advising on Needs in Teacher Preparation". Section III focuses on competency-based teacher preparation programs and a recommendation in regard to state fund support for staff and grants for further program development.
	(Legislature appropriates funds in accordance with State Board request.)

May 30, 1973	State Board approves grants for the third year of the competency program at Wayne State University, College of Education, Department of Vocational and Applied Arts Education.
June 5, 1973	Department of Education, in cooperation with six teacher preparation institutions and one public school district, sponsors a state conference on competency-based teacher education. Approximately 200 were in attendance.
August 22, 1973	State Board approves requests for new and amended programs in teacher education at several institutions with the understanding that the institutions involved will move forward in developing competency-based approaches in their implementation of these programs.
September 11, 1973	State Board approves request for final approval in teacher education from Lake Superior State College with the understanding that the program will move to a competency-based program as rapidly as possible.
October 1973	Michigan Department of Education distributes requests for proposals (RFP) to public schools and teacher education institutions to submit proposals for "The Development of Competency-Based Elementary or Secondary Teacher Preparation Program Models" and for "Procedures and Models for Professional Development Programs for Teachers."
November 27, 1973	Report on "Information Regarding Annual Program Plan for Teacher Preparation" submitted to State Board. Objective three refers to competency-based teacher education.
January 9, 1974	State Board approves four grants for the development of competency-based teacher education programs, two in elementary education and two in the secondary area. Grants total $100,000. The four grants were awarded to: 1) Central Michigan University-Mt. Pleasant Public Schools 2) University of Michigan-Ann Arbor Public Schools

3) Wayne State University-Detroit Public Schools-Grosse Pointe Public Schools-Capital Area Career Center

4) Ferris State College-Big Rapids Public Schools-Reed City Public Schools-Capital Area Career Center

May 14, 1974 — State Board receives staff position paper and plan for CBTE and refers these to the Advisory Council on Teacher Preparation.

May 30, 1974 — Three teacher education institutions (Michigan State University, University of Michigan, Wayne State University) begin developing proposals for research on teacher competencies in conjunction with the National Commission on Performance-Based Teacher Education.

June 1974 — Legislature appropriates $100,000 for competency-based teacher education grants program.

June 4, 1974 — State Board approves requests for new and amended programs in teacher education at several institutions with the understanding that the institutions involved will move forward in developing competency-based approaches in their implementation of these programs.

July 1974 — Survey of the State reveals seventeen institutions involved in CBTE to some degree. Approximately 150 faculty and 4,500 students participating.

August 16, 1974 — Michigan accepts invitation to Multi-State Consortium on Performance-Based Teacher Education.

August 22, 1974 — Initial meeting for the development of a consortium of competency-based teacher education programs in the state of Michigan.

Central Michigan University

The focus of the Elementary Science Project (ESP) is to develop a competency-based college level elementary science methods course. The ESP involves college instructors, elementary teachers, an elementary principal, and a director of elementary curriculum. The cutting edge of the ESP is in the development of seven modules dealing with the interrelated areas of teaching along with twelve modules in the areas of science education. The science modules will incorporate objectives from the State of Michigan Minimal Performance Objectives in elementary science along with input from elementary teachers.

Students currently in two of our science methods course sections will be divided into an experimental group and a traditional group. The experimental group will begin working on the modules on March 18 and will need to successfully complete three modules before they are eligible to try out one of the State Minimal Performance Objectives with children in field experience I. This mini teaching session (field experience I) will come some time at the end of April or the beginning of May, after the student has made several classroom observations. There will be a pre-test and post-test for each college student entering and exiting each module as well as a pre- and post-test of the elementary children receiving instruction by a college student in field experience I.

Work will continue on the ESP through the summer with revisions, changes, deletions, and additions made wherever appropriate. In the fall (September), college students who have been involved in the experimental group and are assigned to a student teaching placement will participate in field experience II.

In the second field experience, the student will follow the same procedures as in the first one except that a different objective will be chosen to be taught to the children. Also, there will be some attempt made to test the college student's retention of information carried over from the science methods course to the student teaching experience.

University of Michigan

The major objectives of the project will be:

--to define the competencies needed, using the Michigan Minimal Performance Objectives in Elementary Science as a base.

--to describe possible delivery systems for aiding student acquistion of the competencies.

--to develop an assessment model for measuring the degree of competency achievement at various stages of the teacher preparation program.

The initial phase of the project will provide orientation to competency-based teacher education, to the specific requirement of this project, and to the Michigan Minimal Performance Objectives in Elementary Science.

This phase will be followed by the development of the list of competencies. A team of Ann Arbor Public Schools teachers and administrators and University of Michigan faculty and students will work in sub-groups to generate independent competency lists. Consensus-reaching activities will follow. Additional validation will be sought through comparisons to other such lists in the literature.

Subsequent phases will involve identification and description of possible delivery systems and development of assessment procedures to validate the competencies and to measure the achievement of the students within the teacher education programs. The project proposal indicated that the assessment phase will be primarily centered in one Ann Arbor elementary school, with involvement of the principal and teachers in that building. The University students would be assigned there for field experience and directed teaching.

Wayne State University - Ferris State College - Michigan COAST Project (Competencies Oriented to All Secondary Teachers)

The Michigan COAST Project is a statewide effort to design a competency-based program model for the preparation of teachers in all secondary school disciplines. The model will be based upon the input of selected classroom teachers from five school districts representing 18 disciplines:

A. Big Rapids Public Schools
Capital Area Career Center, Mason, Michigan
Detroit Public Schools
Grosse Pointe Public Schools
Reed City Public Schools

B. selected faculty from two teacher training institutions:

Ferris State College
Wayne State University

There are four components to the project:

1. The identification and validation of teaching[1] competencies common to all secondary teachers.

2. The development and selected tryout of an assessment model to determine if an individual has achieved a competency.

3. The preparation and tryout of instructional modules and supporting media for selected competencies.

4. The documentation and distribution of the resulting model to Michigan's 30 teacher preparation institutions and the 5 cooperating school districts.

All project efforts are toward the development of a model which can be replicated, adapted, or adopted in any Michigan secondary teacher education program.

[1]This project is only concerned with those competencies relating to teaching skills and knowledges. It is not concerned with the content, knowledges and skills specific to each separate discipline. For example, COAST would deal with how to teach English rather than special skills related to writing, literature, analysis, etc.

Criteria for Selection of Participants

A. Teacher Educator participants should be:

1. commited to the general concepts of competency-based teacher education.

2. able to participate in five full-day meetings during 1974.

3. representative of disciplines and geographical areas required to meet project goals.

B. Master Teacher participants should be:

1. interested in improving the preparation of teachers.

2. willing to explore the notions of competency-based education.

3. able to participate in five full-day meetings in 1974.

4. representative of the disciplines and geographical areas required to meet project goals.

In addition, some participants will be needed who are interested in involvement in the tryout of test items and instructional modules; and selected teacher educators will be needed who are interested in writing instructional modules for extra compensation during the summer and/or fall months of 1974.

The following represents the basic areas of concern involving Ferris State College.

Definition of Assessment Need

The assessment aspect of the CBTE program design is a major problem. This problem appears to concern two major questions:

1. What is an assessment model that every Michigan teacher education institution could use to:

a. construct test items for competency assessment?

b. construct a process for module assessment with selected "try-out"?

c. provide for both pre-test and post-test?

d. incorporate field-based assessment?

e. establish reliability and validity of the assessment procedure?

2. How can assessment data and procedures be utilized in a scheme for general program evaluation?

The LEA's will be involved in the following phases of the assessment component of the project: a) identifying guidelines of the model, b) clarifying process (review of model), c) determining levels of achievement (criteria), and d) pragmatics of field implementation.

Instructional Materials

Instructional materials development consists of the process of identifying, developing, or adapting the preparation materials designed to provide the trainee the opportunity to acquire the necessary knowledge and skills prerequisite to a demonstration of the competencies previously specified.

A model framework for CBTE instructional materials development involves the purchase and review of available CBTE instructional materials, the selective development of additional instructional materials, and the adaptation of each to specific phases within the professional sequence. It involves development of media and the development of a representative sampling of modules or instructional packages intended for trainee utilization in the preparation for competency demonstration, and the "trying out" or testing of modules in a variety of settings to determine their effectiveness.

A SURVEY OF COMPETENCY-BASED TEACHER EDUCATION PROGRAMS IN THE STATE OF MICHIGAN

A Synopsis

PART II

An Overview

In March 1974 a survey form was distributed to the thirty teacher education institutions in Michigan concerning competency-based teacher education (CBTE) activities at each institution. In order to provide a frame of reference, a general definition of CBTE was provided as follows:

> Competencies to be demonstrated are explicitly stated and made public in advance; learning activities to facilitate student's achievement of competencies are developed; criteria for assessing competencies are consistent with specified competencies, are explicit, and made public in advance; and performance is the primary source of evidence.

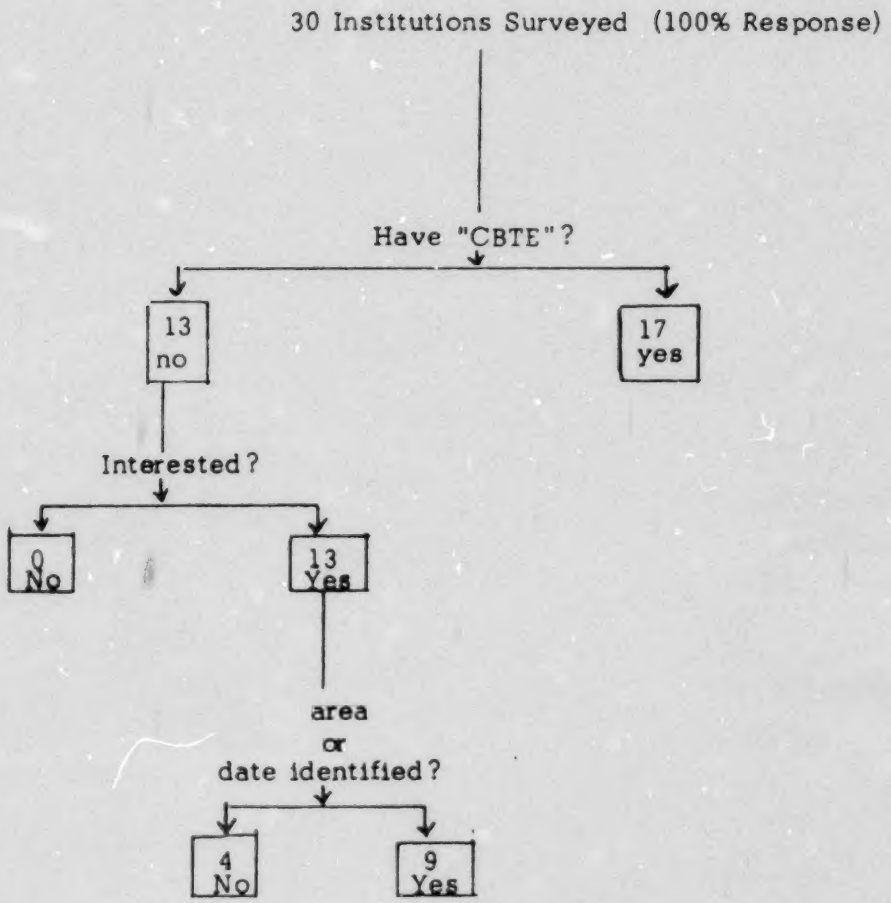
Although it is recognized that there is no generally accepted definition of CBTE, a relatively broad definition was provided in order to obtain as much information as possible and avoid limited responses because of a more precise definition. The main purpose was to solicit as much information as possible on activities within the rubric "competency-based." Although programs indicated they were competency-based, it is difficult to classify all these programs as being competency-based. The total response from each institution must be examined in order to make that determination. A more complete analysis of CBTE definitions can be found in "Competency-Based Teacher Education/Certification Definitions: Synthesis and Schema," Robert A. Roth, Michigan Department of Education.

Each respondent was asked to answer one of two basic questions.

a. We do not have any CBTE programs at this time or

b. We do have some CBTE programs.

Of the thirty institutional responses (100% return) thirteen reported no CBTE programs at this time while seventeen reported programs of one kind or another (figure 1). The extent of involvement of these institutions, however, varied significantly ranging from one course to an entire instructional area to plans for the entire four-year program.


30 Institutions Surveyed (100% Response)
Have "CBTE"?
13
no
17
yes
Interested?
0
No
13
Yes
area
or
date identified?
4
No
9
Yes

(figure 1)

A. Institutions who do not have CBTE programs.

For those institutions indicating that they do not have CBTE programs at this time, two additional items required a response. The first was "we are, however, interested in and exploring the concept." All thirteen institutions responded positively to this question. The second item asked if there were plans to implement CBTE on a trial basis and if so, when and in what areas. Nine of the thirteen institutions indicated an approximate time of implementation and listed proposed areas. These nine institutions plan to have some type of CBTE program within the next few years. Proposed programs are identified within the descriptions of each institution.

B. Institutions who have CBTE programs.

Seventeen institutions reported one or more CBTE programs. The following pages contain brief descriptions of programs at each institution, and selected survey questions. A more complete survey response and descriptions of programs can be found in the detailed report, "A Survey of Competency-Based Teacher Education Programs in the State of Michigan - 1974."

Selected survey questions:

Note: The following are cumulative responses to survey questions. In those instances where an institution returned more than one survey, i.e. more than one program was reported, each survey return was included in the cumulative responses, hence, for most questions more than seventeen responses are indicated.

Program competencies are based on

25 1) knowledge criteria (assess cognitive understandings)

23 2) performance criteria (assess teaching behaviors)

14 3) product criteria (assess effectiveness in terms of pupil growth)

Other Program Characteristics

16 4) Modules have been developed (modules are learning activities which specify objectives, prerequisites, pre-assessment, learning activities, post-assessment techniques and standards).

15 5) Instruction is individualized and personalized real choices among means to achieve objectives are made available to the individual. (e.g. class attendance not mandatory, other options available). (some - 2)

6) Total number of faculty involved? Range from one to all faculty (in that area), total less than 150.

7) Total number of students involved? (Range: 15 to 1,000, total about 4,500).

8) Reaction to your CBTE program:

Positive 20 (one "limited positive" but program not operational)
Negative 0 (one reported "too new" to react, one reported mixed reaction but program not operational. One reported "so-so" reaction)

Comments:

"Feedback from students and public school personnel has been overwhelmingly positive."

"Increasingly, as teachers in our schools understand our program the reaction is excellent and supportive (as evidenced by many wanting to 'get in' at the learning level). Students seem to support it as good for them, but very difficult."

"We get very good feedback, students are seen as better prepared for student teaching."

9) Please provide any information on costs, including development and management.

1. "No specific cost figures can be given at the present time but it can be noted that a very significant increase in cost is felt necessary."

2. Annual cost for program implementation is $1,500. Initial cost for support materials was about $3,500.

3. Materials and supplies estimate $5,000, 1973-74.

Teacher Education Institution Status Reports

ADRIAN COLLEGE

Competency-based teacher education at Adrian College has been developed be professors working independently, that is, without a college-wide program. The program at the present time is limited to the methods courses in the teaching of reading (40 students); home economics (13 students); social studies in the elementary, and secondary school (15 students); audio visual education (98 students); and, associate teaching (106 students). In the associate teaching program a list of 45 competencies designed to evaluate teaching effectiveness, ability to work with people, and development of personal and professional qualities are used.

ALBION COLLEGE

No CBTE programs at this time, however, interested and exploring the concept.

ALMA COLLEGE

The initial move has been in elementary education, and it has been in those teaching methods areas most amenable to CBTE: science, mathematics, and reading. For several years the elective course, Educational Technology, has been competency-based.

ANDREWS UNIVERSITY

No CBTE programs at this time.

AQUINAS COLLEGE

The program is the reading-language arts component of the Model Teacher Education Program (METEP) funded by OE at the University of Massachusetts. It was developed by Dr. David Yarington, Dr. Masha Rudman, and students. It has been tested with over 2000 students over a period of five years. It's major strength is that it provides alternatives for students in choice of modules and in choice of learning opportunities. Approximately fifty elementary and twenty secondary students are involved.

CALVIN COLLEGE

The elementary and special education tracks continue to promote a CBTE framework. The most salient features continued in the program are: 1) pre-specification of objectives, and 2) a laboratory dimension to "book learning." Future goal is to increase specification, at the performance level, behaviors relevant to teaching/learning. Approximately 150 students involved.

CENTRAL MICHIGAN UNIVERSITY

A number of programs are in operation at this university, as follows:

Home Economics: Approximately twenty-two students in methods and curriculum in home economics.

Student Teaching:

a. Northeastern Student Teaching Center: The focus in the program is upon specified performance competencies. Learning activities are predominantly individualized with some small group interaction also. Such learning experiences evolve from separate modules/learning packets, each designed to guide the student through learning activities at both knowledge and performance criteria levels.

b. Swan Valley Teacher Education Center: Two years ago teachers and administrators identified fifty-five teacher competencies which must be demonstrated before completion of student teaching. These are continually being revised.

*c. Student Teaching Department--Our department has been earnestly pursuing the accomplishment of the CBTE TASK FORCE REPORT charges:

1) To formulate competency seatements for the courses within our department leading to initial certification and

2) To develop evaluation procedures and/or instruments for the evaluation of these competencies.

CBTE work developed via total departmental workshop sessions. Goal/objectives have been produced for all courses.

Educational Media: Competency-based course since 1973. About 1,000 students per year. Eight modules.

*Early Childhood and Elementary: Developing goals and competency statements in several courses with emphasis on methods courses. In some cases, competencies, activities, criteria, and evaluation techniques.

*Special Education: Working on CBTE three years.

*Psychology: Eleven major areas of competency, within each 67 specific competencies with specific criteria and methods of evaluation. 1974-75 is a field test year.

Elementary Science: See CBTE Grants Programs Descriptions, page 5.

Industrial Education and Technology: Under the leadership of Drs. Ronald Lutz and Joe Yabu, two of the professional methods classes have been developed on a competency base. These courses include a Curriculum Development and Facility Planning course and a Problems and Methods of Teaching Industrial Education course.

Future efforts will include an in-service session with selected members of the department. Following the effort, a systematic effort will be made during the forthcoming academic year to develop a technical course offering on a competency base.

*Guidance and Counselor Education: The competency-based educational goals of the Department of Guidance and Counselor Education were:

1. To develop a taxonomy of behavioral outcomes or criterion variables.

2. To develop a taxonomy of experimental or independent variables which are applied to produce behavioral outcomes.

3. To identify the variables that describe the pyschological setting and environmental conditions relevant to a functioning counselor.

4. The identification and definition of variables descriptive of functional counselor effectiveness.

Presently the staff members are engaged in the process of integrating the results of their study.

*Educational Administration: Presently the Department of Educational Administration is designing a formal CB program for secondary school principals.

Competency statements have been written and will be presented using a three phase model; familiarity with the technical, conceptual, and human aspects of problem resolution, understanding of these areas, and the application of approved and accepted administrative practices.

EASTERN MICHIGAN UNIVERSITY

No CBTE programs at this time, however, planning to implement CBTE program within the next two years in the following areas:

Elementary education	
Secondary education:	industrial arts
Graduate programs:	Guidance and Counseling, special education (learning disabilities) industrial arts, early childhood education, elementary education.

*Excerpted from "School of Education Newsletter" Central Michigan University, V. 3, No. 3, May 1974.

FERRIS STATE

No CBTE programs at this time, however, planning to implement CBTE program within one year in the following areas:

Secondary education: allied health education, business education, math education, science education, trade-technical education.

Efforts are following a systemic approach using competencies based upon the activities of an instructional development model.

Performance objectives are nearing adoption for competency clusters in Instructional Media and Evaluation. Student involvement is provided for in the adoption process, particularly related to language clarity and understanding. Also see CBTE Grant Programs descriptions, page 7.

GRAND VALLEY STATE COLLEGE

No CBTE program at this time, however, planning to implement program within two years in the following areas:

Granduate programs: Elementary, middle school, secondary school, special education.

Special education: An undergraduate learning disabilities program has recently been approved by the State Board.

HILLSDALE COLLEGE

No CBTE programs at this time.

HOPE COLLEGE

No CBTE program at this time, however, planning to implement program in the next few years in the following areas:

Elementary education
Secondary education: Professional education sequence

KALAMAZOO COLLEGE

No CBTE program at this time, however, planning to implement program in the next few years in the following area:

Secondary education: basic liberal arts subject

LAKE SUPERIOR STATE COLLEGE

Partial implementation with further implementation within the next two years in the following area:

Child Development Associate (1974-75)

MADONNA COLLEGE

In 1972 Madonna College developed a competency-based field experience oriented teacher preparation program for all its education students. Early field experience, and personalized contracts were established as the means for developing a set of 18 competencies which were derived from the teaching-learning process. The 1973 class of 40 prospective teachers was the first to graduate having demonstrated at least an initial level of performance in each of the competency areas. The 1974 class of 25 will have demonstrated competency in a variety of settings in both short and longer range experiences.

No pre-defined criteria for assessing competency have been established and made public in advance. Expected levels of mastery are left open-ended and not prescribed.

In addition, an undergraduate learning disabilities program has been approved by the State Board.

MARYGROVE COLLEGE

All members of the Education Department at Marygrove College are actively working on a CBTE program. A committee has organized all of the present course objectives into knowledge, component performance, and integrated performance categories. We are ready to complete a needs assessment by applying criteria to objectives. The next step will be to determine major exit competencies. The department will develop a PERT chart for the next three years during their May workshops. In addition, the State Board has approved a graduate program in learning disabilities.

MERCY COLLEGE

CBTE program is restricted at this time to only one course in the sophomore year. Two others are now in the planning stages.

MICHIGAN STATE UNIVERSITY

A number of programs are in operation at this university as follows:

Elementary education: This was initially funded by FPDA B-2 grants. The state -level pupil performance objective materials in reading and mathematics were made available to MSU and public school staff who defined competencies in terms of those objectives. They also developed training modules and assessment procedures. In addition, the project includes teacher competencies in the social-emotional area. Approximately twenty-two interns were involved in the program initially.

Generic Competency Program: This program involves the development of, and instruction in, several competencies judged to be of a generic nature, i.e. generally applicable to teachers at all (most) grade levels and subject areas. The project was planned in the spring of 1972 with the initial development taking place during the 1972-73 school year, and was financed in part by an EPDA B-2 grant from the Michigan State Department of Education to the Lansing School District and Michigan State University. The program in its present state, involves instruction in planning, management, and reading. An inservice program for teachers in the schools where undergraduate students are assigned for their field experiences in the program is in operation and final evaluation of competency in each of the competency areas is effected in the field during the student teaching experience.

During the spring quarter of 1974, fifty-five students are participating in the second phase (student teaching) of the program and 82 in the first term (pre-student teaching). The proportion of the fall term students in this CBTE program is about 19%.

Future directions: It is anticipated that it will be recommended that the program expand to include most, if not all, the people going through the undergraduate program who are not enrolled in special projects.

Physical Education and Recreation for the Handicapped: The Physical Education and Recreation curriculum preparing students to work with handicapped is totally competency-based, field -centered, at the master's level.

The undergraduate curriculum have aspects which are competency-based. In addition, we offer a competency-based program (course) to the students in Special Education to prepare them as teachers to work in physical education and recreation with their handicapped student. This same competency package is being used for in-service training of special educators.

Elementary Reading Methods: Involves about 200 students per term, in operation since 1970. Approximately 4,500 students have graduated who have had this course.

Secondary Education: This is a four year undergraduate secondary education pilot program which began in the fall, 1973, involving about 25% of the freshmen.

School Psychological Services: The competency-based specialist program currently enrolls 22 students with seven faculty members. Individual programs are planned to take into account the professional goals and background of each student.

Special Education: A graduate learning disabilities program has been approved by the State Board.

Counseling, Personnel Services and Educational Psychology: The Systematic Counseling program was begun in 1968 and has grown to accommodate approximately 100 students each year in elementary and secondary counseling, community college counseling and rehabilitation counseling. It is being expanded to include urban counseling during 1974-75. Over 500 trainees have graduated from the program.

Secondary Education and Curriculum: An undergraduate degree program in vocational education planned for 1975-76.

MICHIGAN TECHNOLOGICAL UNIVERSITY

Secondary science and math programs involving 15 students each, first year of operation.

NAZARETH COLLEGE

In the process of developing its entire four-year program in competency-based terms, referred to as the McGrail Plan. The education program involves six expectations in the liberating arts. The criteria and the exact procedure by which students will be evaluated in the six liberating arts expectations are now being determined by a committee composed of students, faculty and administration. However, it is envisioned that the student and his advisor will present materials to the expectations committees as evidence of the student's fulfillment of the expectations. The committee will then examine the material in close cooperation with the student and his advisor and declare whether or not the student has reached the expected level. The process of achieving the expectations should not be thought of as six comprehesive examinations taken in the last year.

The seventh expectation is the professional competency. The program has the following characteristics:

1. The student does not have to achieve a certain number of credit hours to graduate; he sets his own pace for meeting the expectations.

2. Faculty within the academic areas related to the expectations evaluate the studen'ts fulfillment of the expectations.

3. Students participate in the evaluation process, which is a learning experience for which credit may be earned.

4. The student may fulfill the expectations through a variety of learning experiences such as independent study, tutorials, classes, etc.

5. The student and faculty advisor agree, through an advisory contract, on a plan of study directed toward achievement of the expectations.

6. A committee is studying the feasibility of a plan combining traditional and non-traditional grading systems.

NORTHERN MICHIGAN UNIVERSITY

The programs are not complete, however, they have defined competencies and are now assigning competency development to specific course areas and procedures. Areas include generic competencies in elementary education, competencies in elementary science and math, and generic competencies in secondary education. A graduate learning disabilities program was recently approved by the State Board.

OAKLAND UNIVERSITY

An elementary program is planned to start in 1974-75, and will be a four year competency-based program. In special education, a graduate learning disabilities program was recently approved by the State Board, and an E.D. program is planned for 1974. In 1973 Oakland received a small EPDA B-2 grant from the State Department, which initiated activities to revise the entire elementary program to a competency-base.

Oakland staff assigned to the B-2 program and Pontiac teachers developed preservice competencies for elementary teachers. They also included elementary school students and parents in competency identification. Eighteen interns were involved.

OLIVET COLLEGE

No CBTE programs at this time, however, are interested in and exploring the concept.

SAGINAW VALLEY COLLEGE

An elementary program involving 200 students is in its first year of operation, and is a three semesters program. All faculty and students in this area are involved.

SIENA HEIGHTS COLLEGE

No CBTE programs at this time, however, plan to implement CBTE within the next five years in the following areas:

Secondary education:	Occupational teacher education
Graduate:	Guidance and Counseling

SPRING ARBOR COLLEGE

No CBTE programs at this time, however, are studying CBTE in teacher education committee and plan to implement program within five years in elementary and secondary education

UNIVERSITY OF DETROIT

Programs planned for fall, 1974, include the following: elementary education; secondary education--social studies, science, math, English; graduate education--learning disabilities (also undergraduate), school administration.

UNIVERSITY OF MICHIGAN

Competency-based teacher education in the Teacher Education Division of the University of Michigan was initiated through the Task Force for Innovative Teacher Education in 1972. At that time, it was found that two courses already had been involved in competency-based teacher education. They were the Elementary Science Methods course and the Elementary Math Methods course. Both of these courses defined a series of competencies from which students could choose to go through the program. Some competencies were mandatory; others were student-selected. Reactions from the students and professors in the courses indicated that such a competency-based program should continue.

In 1973-74 secondary school Social Studies Methods course was competency-based in the teacher education component. Competencies were also established in secondary school science education for various phases of science teaching; earth science and biology. Evaluation and research is continuing in these areas.

In 1973 a proposal for developing a competency-based teacher education program in science education was funded by the State Department of Education. See CBTE Grants Programs descriptions, page 6.

The University of Michigan's Occupational Teacher Education Program is a competency oriented approach to teacher training. Common professional teaching competencies are emphasized while individualized learning contracts and directed teaching experiences are utilized to develop applications to specific service areas.

The undergraduate preservice and inservice program began in the fall of 1971 with students recruited from community college vocational-technical curricula. Two hundred and sixty-nine competencies which form the basis of the curriculum content for the University of Michigan's program were chosen from the 384 competencies identified in the "Model Curricula for Vocational and Technical Teacher Education" project at the Ohio State University's Center for Vocational and Technical Education. Acquisition of the competencies is achieved through a variety of learning experiences. The starting point within the curriculum schedule depends upon the entry skills possessed by the students. The competencies to be developed are grouped according to courses.

Interim evaluation of the Undergraduate Occupational Teacher Education Program has indicated success, courses have received high ratings in relation to other courses in the School of Education, attrition is less than five per cent, and earned grade points are in excess of 3.00 for over seventy-five per cent of the students. In addition, a graduate learning disabilities program was approved by the State Board.

WAYNE STATE UNIVERSITY

Vocational Arts Education: A vocational education program (VAE) is in its third year of operation, funded by the Department of Education-Vocation Division. The project has two major facets, an instructional system and a management information system. Seventy-five teacher competencies have been identified (derived from Cotrell Study at Ohio State). The project involves about 1,000 students.

Inter-Disciplinary Program--Five categories of teacher competencies have been identified and include philosophy, values and attitudes, instructional climate, facilitating instruction, and humanities. Each category is subdivided into clusters and elements of tasks which presumably will become specific teacher competencies. This program includes elementary, secondary, and special education areas, and about 1000 students.

Special Education--A graduate learning disabilities program was recently approved by the State Board. Also, see CBTE Grants Programs descriptions, page 7.

WESTERN MICHIGAN UNIVERSITY

Planning to implement CBTE within the next two years, on a limited basis, in the following areas:

Elementary education:	language arts minor
Secondary education:	course in teaching and learning
Graduate program:	introduction to research, learning disabilities
Other:	media competencies used for two years

ALTERNATIVES FOR TEACHER PREPARATION

A Synopsis of
"A Proposed Plan for Competency-Based and
Other Alternative Teacher Education Programs"

PART III

PREFACE

Please note that this document is a "working draft" and is therefore for discussion purposes only. At this time it does not necessarily reflect the position of the State Department of Education or the State Board of Education. This document and the more comprehensive form from which it was derived have been referred by the State Board of Education to the Advisory Council for Teacher Preparation and Professional Development Services. Please do not cite from this document without clearly indicating its tentative status as described above.

ALTERNATIVES FOR TEACHER PREPARATION

Alternative Teacher Education Programs

The State Board of Education has the responsibility and authority for the certification of teachers and approval of teacher education programs. Consistent with this charge is the review and updating of certification standards and encouragement of improved methods of training teachers. In its continuing interest in the improvement of teacher education programs in the state of Michigan, the State Department of Education supports experimentation and development of alternative or experimental teacher education programs. Rule 53 of the Administrative Rules Governing the Certification of Michigan Teachers currently provides for such programs.

The encouragement of alternative teacher education programs is not an indictment of current teacher education practices but rather a concern for the continual need to improve programs. Change for change sake, however, can be wasteful and non-productive. It is necessary, therefore, to plan thoroughly and study carefully any alternative and pursue those which show signs of merit. In view of this, the Department encourages experimentation with particular emphasis, however, on areas that have shown promise and have the greatest potential. This document, hereafter referred to as the Plan, is an expression of the position advocated in the preceeding paragraph. The Plan proposes activities of Teacher Preparation and Professional Development Services in the encouragement and support of viable alternatives to teacher preparation as one part of the improvement of training teachers.

Competency-Based Teacher Education

One alternative approach that has been identified by a number of colleges and universities is competency-based teacher education. Identification of this approach is evidenced by the number of competency-based programs being developed across the country (491)[1] as well as in the state of Michigan. Reports from those developing CBTE programs and others relate that, although there are problems, reactions have been very positive indicating the approach is promising and has significant potential. The Distinguished Achievement Award for Excellence in Teacher Education, sponsored by the AACTE, was awarded to a competency-based teacher education program in 1971 and 1974. Also, in 1974, AACTE cited another competency-based program for distinguished achievement, and awarded four of its five Certificates of Recognition to competency-based programs.

The state of Michigan has already begun exploration of this concept. In October of 1971 the Michigan State Board of Education endorsed a position paper on competency-based teacher preparation. This position paper proposed that Michigan explore competency-based teacher preparation programs as an alternative to the present system of preparation programs based on the college course-credit system.

Consistent with this position, the State Board in 1972 awarded two grants under the Education Professions Development Act Part B-2 for the development of Competency-Based Teacher Education (CBTE) programs. In 1974 four grants from state funds were awarded for the development of additional programs at both the elementary and secondary levels.

On the basis of information received relating to these grant programs and activities in other states, the State Department of Education proposes the continued support of this approach to teacher education. In order to provide for an effective process and the careful study required throughout the process, a well defined goal and related plan is essential. The remainder of this document responds to this need. For the purposes of the plan, CBTE is defined as follows:

[1]Allen Schmieder, Competency-Based Education: The State of the Scene, AACTE: PBTE Series No. 9., 1973, p. 11.

Essential characteristics:

Competencies (knowledge, performance) are explicit (specific and made public).

Criteria for assessment are explicit, directly related to the stated competencies, and made public.

The student is accountable for the competencies, and his rate of progress is dependent upon competency achievement.

Frequently incorporated characteristics:

The program is individualized providing choices of a variety of modes of instruction (e.g. modularized) and oriented toward the development of a student's competencies.

The program is field centered, systemic, and may include consequence (pupil growth) objectives.

Goal Statement

The goals are to:

1. Foster development of alternatives to the present approved program system and program alternatives within the system which enhance the assurance that students in Michigan schools will be provided with teachers that are competent in knowledge areas, such as a teaching specialty and child growth and development.

2. Foster a process by which teachers acquire the necessary teaching and management skills to enable children to learn.

3. Establish a process by which demonstrated competence in teaching skills necessary to enable children to learn, supports a decision to issue a teacher's certificate.

4. Provide a state system and funding for professional development programs based upon teachers needs for assistance in improving teaching skills.

5. Develop a cooperative state program to foster research to create new knowledge about teaching and teacher preparation, and disseminate knowledge necessary for improvements in preservice training and professional development programs.

State Role

It is suggested that the State adopt the position of facilitating the development of alternative preservice teacher education programs as opposed to mandating any one type. This includes tne organization of a comprehensive support system as an incentive. Currently, particular emphasis will be on competency-based programs, an alternative which has been identified as having significant potential for teacher education. After a sufficient number of programs have been in operation for a long enough period of time to provide adequate information concerning the relative merits of such programs, decisions can be made about the next step to be taken concerning any given alternative.

Certification Pattern

The current three year period of successful teaching and the six year period for which the certificate is valid provide an opportunity for new teacher involvement in professional development programs. Efforts should be directed at developing appropriate professional development training programs and support systems.

After a period of professional development program operation, a number of options for the certification pattern are available for pilot programming. A general outline of professional preparation and development is shown in figure 1. Using this basic sequence, a variety of specific patterns can be developed for discussion.

Delivery System

Preservice

The preservice programs are provided by colleges and universities and approved through the approved program approach for certification purposes. The proposal recommends that this situation be maintained with no

PROFESSIONAL PREPARATION AND DEVELOPMENT PATTERN

Service Period	Pre-Service	Intern-Service	Provisional Service	Continuing Service
responsibility	College	Local District College	Local District	Local District College
competency areas emphasis	knowledge skills attributes	knowledge skills attributes	knowledge skills attributes	knowledge skills attributes
mechanism	college	school college	school Teacher Center	Teacher Center
certification: a) required b) earned	a) none b) none	a) none b) Provisional	a) Provisional b) Continuing	Continuing

(figure 1)

components mandated at this time. Efforts will be made, through development of a support system and staff activity, to encourage staff administering teacher preparation programs to define competencies, design training materials to develop these competencies, and develop related assessment techniques. The relationship between teacher preparation programs and State Board approved pupil performance objectives will be stressed. Alternatives which focus on this relationship and on cooperative school-college program development will be encouraged.

Professional Development

A second essential aspect of the delivery system is the professional development component. These programs will also be encouraged to define competencies, design training materials to develop these competencies, and develop assessment techniques related to the competencies for the purposes of the professional development program. Support shall be provided for this process as described under the support system section. If it is believed that the preparation of the professional educator is a continuous process, then the preservice and professional development components should be closely linked rather than perpetuating a disjointed process.

Competencies utilized in the professional development programs should be locally derived and related to the common goals of education and State Board of Education approved pupil performance objectives as a minimum, but not limited to these. In addition to the State Board pupil objectives, competencies should be designed to fit the objectives and priorities of the local situation. Teachers, of course, should be the prime generators of content for professional development programs in their respective areas.

Distinctions between competencies at the preservice and professional development levels, and at various certification levels, should be made in terms of the type, number, degree of specificity, and criterion levels only as possible and appropriate to the local context. It is important to note that determinations of competency distinctions at various levels do not currently exist, and these differences should not be required until it has been determined that such distinctions can be made and that they represent real differences in competency. Answers to these concerns can only be made by the actual defining and testing of such competencies.

Support Mechanism

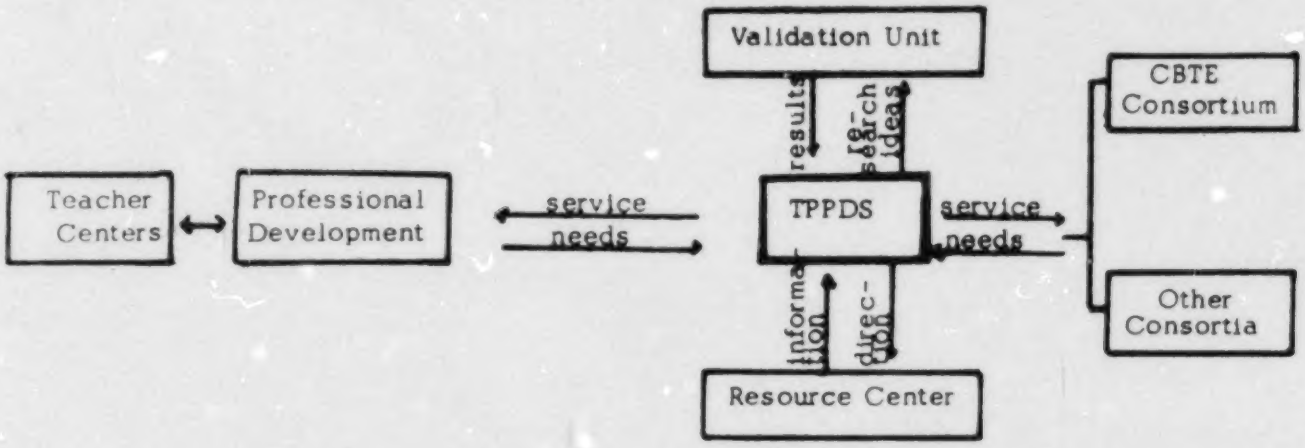
A comprehensive support system for the development of programs should be initiated in the state of Michigan. This system should provide support to both the preservice and professional development programs proposed. The support system should have a central coordinating agency (Teacher Preparation and Professional Development Services) with several related services (figure 2) including the following:

1. A consortium of institutions working on a particular alternative whose purpose is to share ideas, discuss problems, and propose related activities. Several institutions currently have CBTE programs, hence, a CBTE Consortium would be the only one which could be organized at this time.

2. Professional development program assistance in terms of materials, training and consultant services, with emphasis on the CBTE alternative.

3. A Resource Center to assemble all available materials pertinent to innovative programs from across the country (including CBTE), to catalog such material, and to insure accessibility of this information.

4. A systematic program of research under the auspices of a Validation Unit whose function is to validate competencies and teacher training materials.



(figure 2)

It is proposed that the mechanism for professional development programs include teacher centers developed specifically for professional development. The teacher center should be developed around the intermediate school districts as the organizational unit and should be State supported. These state-administered centers are designed to provide for teachers and other professionals, including administrators, an opportunity to upgrade the skills related to their professional activity in a setting near their work. These regional teacher centers should have input from any educational organization with expertise to offer in the inservice education of teachers. A detailed description of these teacher centers can be found in "A Proposed Statute Authorizing Teacher Centers for Michigan," Michigan Department of Education, December 1973.

Because of the gradual approach proposed in this document, and the need to examine results of operating programs before determining future steps, it is essential that evaluation of programs be built into the State plan. This applies, of course, to both the preservice and professional development situations. This is a key feature of the proposal because of the future decision making required.

Regulation Changes

Certain regulation changes will be necessary to implement this proposal. Others may become necessary later if decisions are made to accept components of alternative programs which prove effective. Rule 53 already provides for alternatives, however, funds will be necessary for certain elements of this proposal.

This proposal requires the following changes:

1. creation of, and appropriation of funds for, teacher centers
2. creation of, and appropriation of funds for, the support system

Management Plan

The goal of the program can be stated in terms of more specific objectives, which define how it is perceived the goal may be achieved. The objectives of the program are to:

1. identify the State's approach to various alternative teacher education approaches, including competency-based teacher education, currently deemed appropriate

2. develop a plan for the implementation of the approach identified

3. operationalize an appropriate delivery system at both the preservice and professional development levels

4. organize a support system for the implementation of the plan, including resources, research, and cooperative development

5. determine changes in the certification system, if any are desired, which are consistent with the State approach identified

6. enact changes in regulations which facilitate the proposed plan

7. continually evaluate the effectiveness and cost of the system in relation to the basic objective and goal

Figure three provides an overview of the plan.

In general terms, the steps to be taken in the near future are as follows:

1. discussion of this proposed plan

2. adoption of a plan based on input

If the basic tenets of this plan are accepted, then

3. development of Resource Center

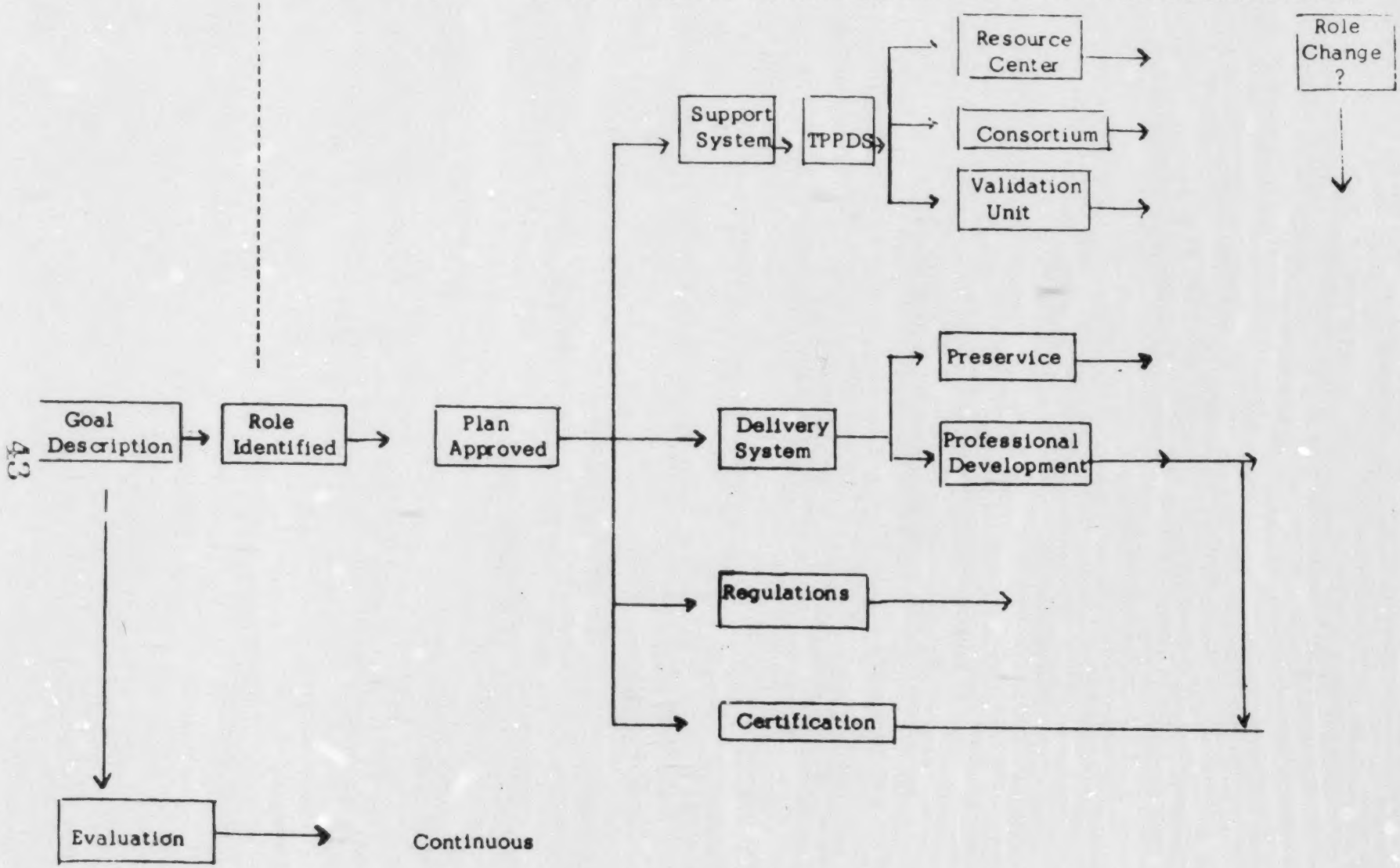
4. organization of Consortia

5. initiation of Teacher Centers (intermediate districts)

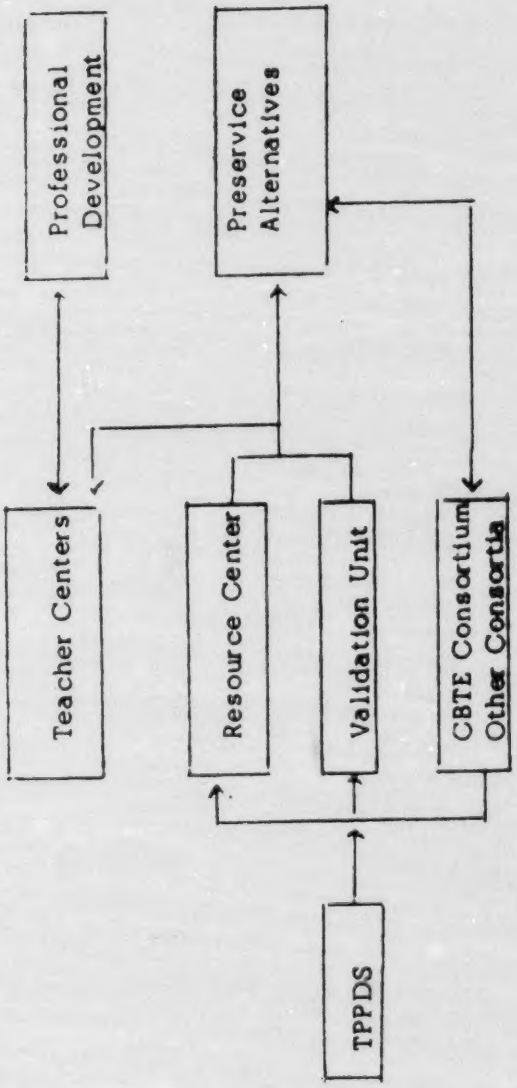
6. design of Validation Unit (research on competencies, etc.)

Other issues, such as certification, are to be deferred until programs in operation produce sufficient data for evaluation.

A more complete description and an analysis of the issues, problems, and alternative approaches to CBTE can be found in State Level Planning for Competency-Based and Other Alternative Teacher Education Programs, June 1974, available from the Michigan Department of Education (Teacher Preparation and Professional Development Services).



MANAGEMENT PLAN - OVERVIEW
(figure 3)



PROPOSED CBTE SYSTEM OVERVIEW

(figure 4)

COMPETENCY-BASED TEACHER EDUCATION AND CERTIFICATION DEFINITIONS

SYNTHESIS AND SCHEMA

PART IV

Introduction

The concept of competency-based teacher education and certification is currently one of the most frequently discussed and controversial subjects in teacher education. A controversy within this movement is one of definition. Just what is competency-based (or performance-based) teacher education and certification? As an attempt to assist those who wish to become informed about this topic, a number of definitions have been assembled in this document.

An attempt has also been made to synthesize the definitions and provide the reader with a concise yet comprehensive overview of the elements of the definitions. A very real problem exists, however, in that some programs will insist that certain elements are not necessary for a CBTE program, while others will insist that these same elements are absolutely essential. Some have concluded that there is no single type of CBTE program, but many types, hence, it is a multiple concept with as many definitions.

Facing the fact that we do not have a completely agreed upon set of criteria for defining the concept, the problem becomes one of synthesizing without violating commonly accepted, yet opposing, viewpoints. Two different approaches to synthesis have been attempted here. In the case of competency-based teacher certification, a continuum is provided to illustrate the variety of state approaches. In the case of competency-based teacher education, a linear relation among programs was not observed, therefore, a profile approach was developed.

The continuum and profile are not offered as precise definitions. They are meant instead to give those unfamiliar with the competency approach an overview of the alternative models. Also, for those states and institutions already involved in an operational program, the continuum or profile may assist in defining that particular program and place it in the perspective of other alternative models or approaches.

Competency-Based Teacher Education Definitions

1. In performance-based programs performance goals are specified, and agreed to, in rigorous detail in advance of instruction. The student must either be able to demonstrate his ability to promote desirable learning or exhibit behaviors known to promote it. He is held accountable, not for passing grades, but for attaining a given level of competency in performing the essential tasks of teaching; the training institution is itself held accountable for producing able teachers. Emphasis is on demonstrated product or output.[1]

Essential Elements

In the State of the Art Publication[1] December 1971	"Essential Defining Characteristics of PBTE" as viewed by the AACTE Committee[2]
A teacher education program is performance-based if	
1) Competencies to be demonstrated by the student are	1) Competencies to be demonstrated by the student are
·derived from explicit conceptions of teacher roles,	·derived from explicit conceptions of teacher roles <u>in achieving school goals</u>,
	·<u>supported by research, curriculum and job analysis, and/or experienced teacher judgment</u>,
·stated so as to make possible assessment of a student's behavior in relation to specific competencies, and	·stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
·made public in advance.	·made public in advance.

[1]Stanley Elam. <u>Performance-Based Teacher Education: What is the State of the Art</u>? PBTE Series: No. 1. Washington, D.C.: American Association of Colleges for Teacher Education, 1971. pp. 1,2,6,7,8.

[2]AACTE "Essential Defining Characteristics of PBTE' as Viewed by the AACTE Committee" in <u>Achieving the Potential of Performance-Based Teacher Education: Recommendations</u>, PBTE Series: No. 16. Washington, D.C.: American Association of Colleges for Teacher Education, 1974. pp.32,33.

2) Criteria to be employed in assessing competencies are ·based upon, and in harmony with, specified competencies, ·explicit in stating expected levels of mastery under specified conditions, and ·made public in advance.	2) Criteria to be employed in assessing competencies are ·based upon, and in harmony with, specified competencies, ·explicit in stating expected levels of mastery under specified conditions, and ·made public in advance.
3) Assessment of the student's competency ·uses his performance as a primary source of evidence, ·takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behaviors, and strives for objectivity.	4) Assessment of the student's competency ·uses his performance as a primary source of evidence, ·takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, strives for objectivity, and facilitates future studies of the relation between instruction, competency attainment and achievement of school goals.
4) The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.	5) The student's rate of progress through the program is determined by demonstrated competency.
5) The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.	3) The instructional program provides for the development and evaluation of the student's achievement of each of the competencies specified.

Note: Underlining used to cite differences in the two analyses.

These are generic, essential elements. Only professional training programs that include all of them fall within the AACTE committee's definition of PBTE.

Also from the State of the Art Publication, 1971:

Implied Characteristics	Related, Desirable Characteristics
1. Individualization	1. Field Setting
2. Feedback	2. Broad Base for Decision Making
3. Systemic Program	3. Protocol and Training Materials
4. Exit Requirement Emphasis	4. Student Participation in Decision Making
5. Modularization	5. Research-Oriented and Regenerative
6. Student and Program Accountability	6. Career-Continuous
	7. Role Integration

#2. Criteria for Assessing the Degree to Which Professional Preparation Programs are Competency-Based

Competency Specifications

1.0) Competency statements are derived from and linked to an analysis of job definition and/or a theoretical formulation of professional responsibilities.

2.0) Competency statements describe outcomes expected from the performance of profession-related functions, or those knowledges, skills, and attitudes thought to be essential to the performance of those functions.

3.0) Competency statements are phrased so as to facilitate criterion-referenced assessment.

4.0) Competencies are treated as tentative predictors of professional effectiveness, and subjected to continual validation procedures.

5.0) Competencies are specified and made public prior to instruction.

6.0) Learners completing the CBE program demonstrate a wide range of competency profiles.

Instruction

7.0) The instructional program is derived from and linked to specified competencies.

8.0) Instruction which supports competency development is organized into units of manageable size.

9.0) Instruction is organized and constituted so as to accomodate learner style, sequence preference, pacing, and perceived needs.

10.0) Learner progress is determined by demonstrated competency.

11.0) The extent of learner's progress in demonstrating competencies is made known to him throughout the program.

12.0) Instructional specifications are reviewed and revised based on learner feedback.

Assessment

13.0) Competency measures have validity in relationship to competency statements.

14.0) Competency measures are specific, realistic, and sensitive to nuance.

14.1) Procedures for measuring competency demonstration assure quality and consistency.

14.2) Competency measures allow for the influence of setting variables upon performance.

15.0) Competency measures discriminate on the basis of standards set for competency demonstration.

16.0) Data provided by competency measures are manageable and useful in decision making.

17.0) Competency measures and standards are specified and made public prior to instruction.

Governance and Management

18.0) Statements of policy exist that dictate in broad outline the intended structure, content, operation and resource base of the program, including the teaching competencies to be demonstrated for exit from the program.

19.0) Formally recognized procedures and mechanisms exist for arriving at policy decisions.

19.1) A formally recognized policy making (governing) body exists for the program.

19.2) All institutions, agencies, organizations, and groups participating in the program are represented in policy decisions that affect the program.

19.3) Policy decisions are supported by, and made after consideration of, data on program effectiveness and resources required.

20.0) Management functions, responsibilities, procedures, and mechanisms are clearly defined and made explicit.

20.1) Management decisions reflect stated program philosophy and policy.

20.2) The identified professional with responsibility for decision has authority and resources to implement the decision.

20.3) Program operations are designed to model the characteristics desired of schools and classrooms in which program graduates will teach.

20.3a) Job definitions, staff selections, and responsibility assignments are linked to the management functions that exist.

20.4) Formally recognized procedures and mechanisms exist for arriving at the various levels of program management decisions.

Staff Development

21.0) Program staff attempt to model the attitudes and behaviors desired of students in the program.

22.0) Provisions are made for staff orientation, assessment, and improvement.

23.0) Staff development programs are based upon and engaged in after consideration of data on staff performance.

Total Program

24.0) Research and dissemination activities are an integral part of the total instructional system.

24.1) A research strategy for the validation and revision of program components exists and is operational.

24.2) A data-based management system is operational.

24.3) Procedures for systematic use of available data exist.

25.0) Institutional flexibility is sufficient for all aspects of the program.

25.1) Reward structure in the institution support CBTE roles and requirements.

25.2) Financial structure (monies and other resources) in the system support collaborative arrangements necessary for the program.

25.3) Course, grading, and program revision procedures support the tentativeness necessary to implement the program.

26.0) The program is planned and operated as a totally unified, integrated system.

National Consortium of CBE Centers, August 1974.

3. A competency-based teacher education program has been defined as a program which specifies the competencies to be demonstrated by the student, makes explicit the criteria to be applied in assessing the student's competencies, and holds the student accountable for meeting those criteria.

James M. Cooper, and Wilford A. Weber. "A Competency-Based Systems Approach to Education," Competency-Based Teacher Education: A Systems Approach to Program Design. Edited by James M. Cooper, Wilford A. Weber, and Charles E. Johnson. Berkeley, California: McCutchan Publishing Corporation, 1973. Chapter 1, page 14.

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4. Characteristics of competency-based instruction: "(1) specification of learner objectives in behavioral terms; (2) specification of the means of determining whether performance meets the indicated criterion levels; (3) provision for one or more modes of instruction pertinent to the objectives, through which the learning activities may take place; (4) public sharing of the objectives, criteria, means of assessment, and alternative activities; (5) assessment of the learning experience in terms of competency criteria; and (6) placement on the learner of the accountability for meeting the criteria."

Robert W. Houston, and Robert B. Howsam (Editors). Competency-Based Teacher Education: Progress, Problems, and Prospects. Palo Alto: Science Research Associates, Inc., 1972. pp. 5,6.

#5.

1) Competency-Based Teacher Education (CBTE) -- Respective state educational agency approval of a teacher education preparation program which:

   a. Offers within a designated teaching or educational specialist area for which the state educational agency issues a professional certificate or license.

   b. Designs to evaluate the degree of teaching competence of the students upon entry to, and at progressive points throughout the approved program, and to provide students with an opportunity to acquire proficiency in areas of identified deficiency.

   c. Includes an assessment component to verify the satisfactory attainment of the specified "exit" competencies.

2) Performance-Based Teacher Education (PBTE) -- Synonymous with competency-based teacher education.

Pennsylvania Department of Education. "Competency-Based Teacher Certification in the United States," (Harrisburg: 1973.) p.1.

6. PERFORMANCE OR COMPETENCY? As one talks to proponents of competency-based and performance-based teacher education terminology, it becomes abundantly clear that they refer to the same movement. Advocates of performance-based terminology refer to the way in which teachers demonstrate teaching knowledge and skills. That demonstration is observable (and their objectives are to "write," "do," "describe;" not "understand" or "perceive" which are nonobservable). Further, performance reminds us that knowledge of content and teaching strategies is not sufficient in teaching -- overt action is important.

Competency-based emphasizes a minimum standard; it adds criterion-levels, value orientations, and quality to the definition of the movement. While competency advocates note three levels for criteria -- cognitive, performance, and consequence -- they press for the latter as the most significant measure of effectiveness. Performance advocates, also recognizing consequence as the ultimate test of an individual's effectiveness, point out that many intervening variables affect results (pupil ability, interest, motivation, availability of resources). They stress that our present understanding of these variables and our inability to control them adequately in field settings preclude consequence objectives as realistic requirements. Thus, objectives requiring performance-based is more descriptive as a generic name for this movement.

Both performance-based and competency-based express important elements of the movement -- one focusing on objectives, the other on criteria. Both are useful, not conflicting.

W. Robert Houston. Strategies and Resources for Developing a Competency-Based Teacher Education Program. Multi-State Consortium on Performance-Based Teacher Education. 1972. pp. 25,26.

7. "Performance-based" is a term applied to teacher education programs, as well as other programs having (a) pre-specified objectives (competencies), (b) techniques for assessing the achievement of those objectives, and (c) decision-making regarding training needs based on successful mastery of objectives. The terms "competency-based" and "criterion-referenced" are roughly synonymous with "performance-based" as descriptors of teacher education programs. It should be noted that wide agreement has not been reached as to the characteristics of a performance-based teacher education program. Many authorities consider several conditions in addition to the three described above as necessary. However, it is doubtful that any teacher education program would be considered to be performance-based without (a) pre-specified objectives (competencies), (b) techniques for assessing the achievement of those objectives, and (c) decision-making regarding training needs based upon mastery of those objectives.

Fred Daniel, Associate for Planning, Florida Department of Education. " 'Performance-Based' Does Not Mean a Teacher Education Program is Good -- It Just Means It Is Easier to Tell." September 16, 1971.

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8. The process of designing a competency-based program of initial teacher education requires specifying in advance expected outcomes in terms of competencies to be demonstrated by graduates of the program, developing learning opportunities and environments expected to facilitate students' progress toward specified outcomes, and constructing and using evaluating procedures and instruments directly relevant to the stated competencies. In a well designed program, the result of these steps is a system where feedback channels are busy conveying evidence on the functioning and effect of the system.

Margaret Lindsey, Teachers College, Columbia University. "Performance-based Teacher Education: Examination of a Slogan." Journal of Teacher Education. Fall 1973, Volume XXIV, No. 3. pp. 181, 182.

#9.

Competency-Based Teacher Education

1) A system of teacher education which has its specific purpose the development of specifically described knowledge, skills, and behaviors that will enable a teacher to meet performance criteria for classroom teaching. Presumably, each competency attained by the preservice teacher is related to student learning and can be assessed by the following criteria of competence:

   a. knowledge criteria that assess the cognitive understandings of the teacher education student;

   b. performance criteria that assess specific teaching behaviors; and

   c. product criteria that assess the teacher's ability to examine and assess the achievement of his or her pupils.

Performance-Based Teacher Education

A teacher education program where the learning outcomes and the indicators acceptable as evidence of the realization of these outcomes, specified and made public. (This type of program is sometimes used as the basis for certification of new teachers.) Learning outcomes may be evidenced at:

1) The knowledge level (the result of interacting with "protocol" materials).

2) The skill level (the result of interacting with "training" materials).

3) The output level (the result of interacting with "integrating" materials).

4) The performance level (the behavior of the teacher).

5) The consequence level (the behavior of pupils).

Allen A. Schmieder. Competency-Based Education: The State of the Scene. PBTE Series: No. 9. Washington D.C.: American Association of Colleges for Teacher Education, 1973. pp. 52,63.

10. The competency-based approach can be defined as one which specifies objectives in explicit form and holds prospective teachers accountable for meeting them. Teacher competencies and measures for evaluating them are specified and made known in advance of instruction.

Competency-based programs are criteria references and thus provide information as to the degree of competence attained by a particular student teacher, independent of reference to the performance of others. Competencies may be developed and assessed on three types of criteria:

1) Knowledge -- facts, principles, generalizations, awarenessess, and sensitivities that the student teacher is expected to acquire.

2) Performance--behaviors that the student teacher is expected to demonstrate.

3) Consequences -- outcomes that the student teacher is expected to bring about in the emotional and intellectual growth of his pupils.

Beyond this basic definition, there is confusion even among the disciples of the movement as to what constitutes a CBTE program. Most would agree, though, that a program is competency-based if it possesses the following characteristics:

1) Individualized instruction -- the student teacher is involved in making instructional choices that he considers relevant to his own interests.

2) Instructional modules -- a module is a unit of learning consisting of a set of activities intended to help a student teacher achieve specified objectives.

3) Time as a variable -- completion of modules and rate of progress through the program are determined by the student teacher's competency rather than by the traditional requirement of course completion in a fixed time span.

4) Field-centered instruction -- because of the emphasis on performance in real settings with pupils, there is more and earlier practice teaching.

5) Emphasis on exit rather than entrance -- while program admission requirements are less rigid, demonstration of competency is required for certification.

Two major procedural conditions should exist if the program is approaching the ideal CBTE model: (1) a systems approach, and (2) decision-making by "consortia."

Phyllis D. Hamilton. Competency-Based Teacher Education. Stanford Research Institute, SRI Project 2158. 1973. pp. 3,4.

11.

A Performance-Based Program Includes --

1) Statements of goals for program.

2) Performance objectives for implementation of program goals.

3) Performance tasks for implementation of objectives.

4) Criterion measures for evaluation of performance tasks.

5) Provisions to insure a balance of theory and practice.

6) Systematic evaluation to insure relevancy of assigned tasks for field and campus application.

7) Inservice training to provide maximum effectiveness of campus and field associate teacher trainers.

8) Ongoing evaluation of program to determine degree that program goals are being realized.

Frederic T. Giles. Changing Teacher Education in a Large Urban University. PBTE Series: No. 6. Washington, D.C.: American Association of Colleges for Teacher Education, 1972. p. 12.

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12. A COMPETENCY-BASED TEACHER EDUCATION PROGRAM is one in which the competencies to be demonstrated by the student and the criteria to be applied in assessing the competencies of the student are made explicit and the student is held accountable for meeting those criteria.

Teacher COMPETENCIES refer to those particular attitudes, skills, understandings, and behaviors believed to facilitate the intellectual, social, emotional, and physical growth of children.

The CRITERIA used in assessing the competencies of the student are of three kinds: (1) knowledge criteria which are used to assess the student's cognitive understandings, (2) performance criteria which are used to assess the student's teaching behaviors, and (3) product effectiveness in terms of pupil growth.

The student is held ACCOUNTABLE for demonstrating the competencies specified, not for completing an established number of courses or credit hours; thus, the program is achievement-based, not time-based.

Wilford Weber. "Competency-Based Teacher Education: A Definition." University of Houston. Mimeograph.

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13. While there are numerous features which characterize competency-based teacher education programs, four of the most prominent are (1) the emphasis on clearly specified objectives, (2) the utilization modules, (3) the high priority put on the personalization of instruction, and (4) the emphasis given a field-centered approach.

Wilford A. Weber. "Team Leaders and Competency-Based Teacher Education," Perspectives on the Role of the Teacher Corps Team Leader. The University of Toledo, Project No. 452272, Grant No. OEG-0-70-2272 (715). p. 114.

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14. Competency-Based Teacher Education - systematically designed teacher education programs which typically emphasize the following characteristics:

1) pre-specified public competencies or program goals.

2) pre-specified, public performance objectives.

3) actual competency demonstration.

4) detailed assessment of entering and exiting behavior.

5) new instructional materials with an emphasis on the instructional models.

6) public school cooperation in program development and implementation.

("performance-based teacher education" - synonymous)

Rita C. Richey. "Definition of Selected Terms Related to Competency-Based Teacher Education," Michigan COAST Project. Wayne State University, College of Education, Division of Teacher Education. Detroit, Michigan, May 1974. p.2.

Synthesis of Competency-Based Teacher Education Definitions

An analysis of the preceding definitions led to the development of seven basic components which encompass all facets of programs that were described in the definitions. These components are: competencies, assessment, individualized instruction, field centered, systemic approach, general program characteristics, and decision-making processes. Each of these consists of several factors, the number varying with the component area. Each component and its factors are listed in the following pages.

Those factors marked with an asterisk are "given", that is, the program must have these before an analysis should even be made. There are only three such factors, the only ones where there appears to be unanimous agreement. It is important to note that beyond these three the profile does not indicate how many or which factors are needed as a minimum in order to classify a program as competency-based. Nor does this imply that only those three are sufficient to have a competency-based program. No such agreement among program developers exists. The profile can be considered more of an index of the degree to which a program is competency-based. It is axiomatic that there will be disagreement over these elements!

Competencies

* 1) Competencies are specifically stated in behavioral terms .

* 2) Competencies are made public .

3) Competencies have mastery levels or performance criteria which make criterion assessment possible .

4) Competencies are stated for student teaching .

5) Competencies are stated for some professional education courses or modules .

6) Competencies are stated for entire professional education sequence.

7) Competencies are stated for subject matter areas .

8) Competencies are stated for general studies component.

9) Competencies are derived from a theoretical base.

10) Competencies are derived from an analysis of teacher roles .

11) Competencies are derived from experienced teachers' judgment .

12) Competencies are written in the cognitive area .

13) Competencies are written for performance (teaching) skills .

14) Competencies are written in terms of pupil outcomes (consequence competencies) .

15) Competencies are written in terms of attitudes to be demonstrated .

16) Competencies are subjected to continual validation procedures .

Assessment

* 1) Assessment is directly related to competency statements.

2) Competency assessment is based on stated mastery levels or performance criteria.

3) Assessment allows for influence of context variables upon performance particularly when field centered assessment.

4) Criteria are specified, made public in advance of instruction.

5) Assessment utilizes performance as primary evidence.

6) Assessment strives for objectivity and consistency.

7) The learner is accountable to achieve competencies.

Individualized Instruction

1) Accomodates learner style (sequence preference, pacing, perceived need).

2) Alternative instructional modes available for competency attainment.

3) Modularized instruction.

4) Student choice of objectives.

5) Exit requirement emphasis, time is a variable.

6) Rate of progress determined by competency completion.

7) Significant student-instructor contact (personalized).

Field Centered

1) Pre-student teaching field experiences

2) Evaluation of some module objectives in the schools

3) On-site training in school settings

4) In-service component of program

5) School personnel involved in assessment

6) School personnel involved in formal instruction

Systemic

1) Data is collected on the program and students

2) Feedback of evidence on functioning and effectiveness of the system, feedback to students continual

3) Regenerative program - continual revision, systematic evaluation to insure relevancy of tasks, instruction revised on basis of learner feedback

4) Management system established - accounting of program, students, and materials

5) Effective communication system within program and among staff

Program

1) Instruction intended to facilitate development of competencies and derived from competency statements.

2) Research oriented, promotes research on competencies.

3) On-going program evaluation to determine if goals achieved.

4) Totally unified and integrated program.

5) The program is accountable for: meeting student needs, relevancy, effectiveness.

Decision-Making

1) Decisions based on feedback, input of data, and competency assessment.

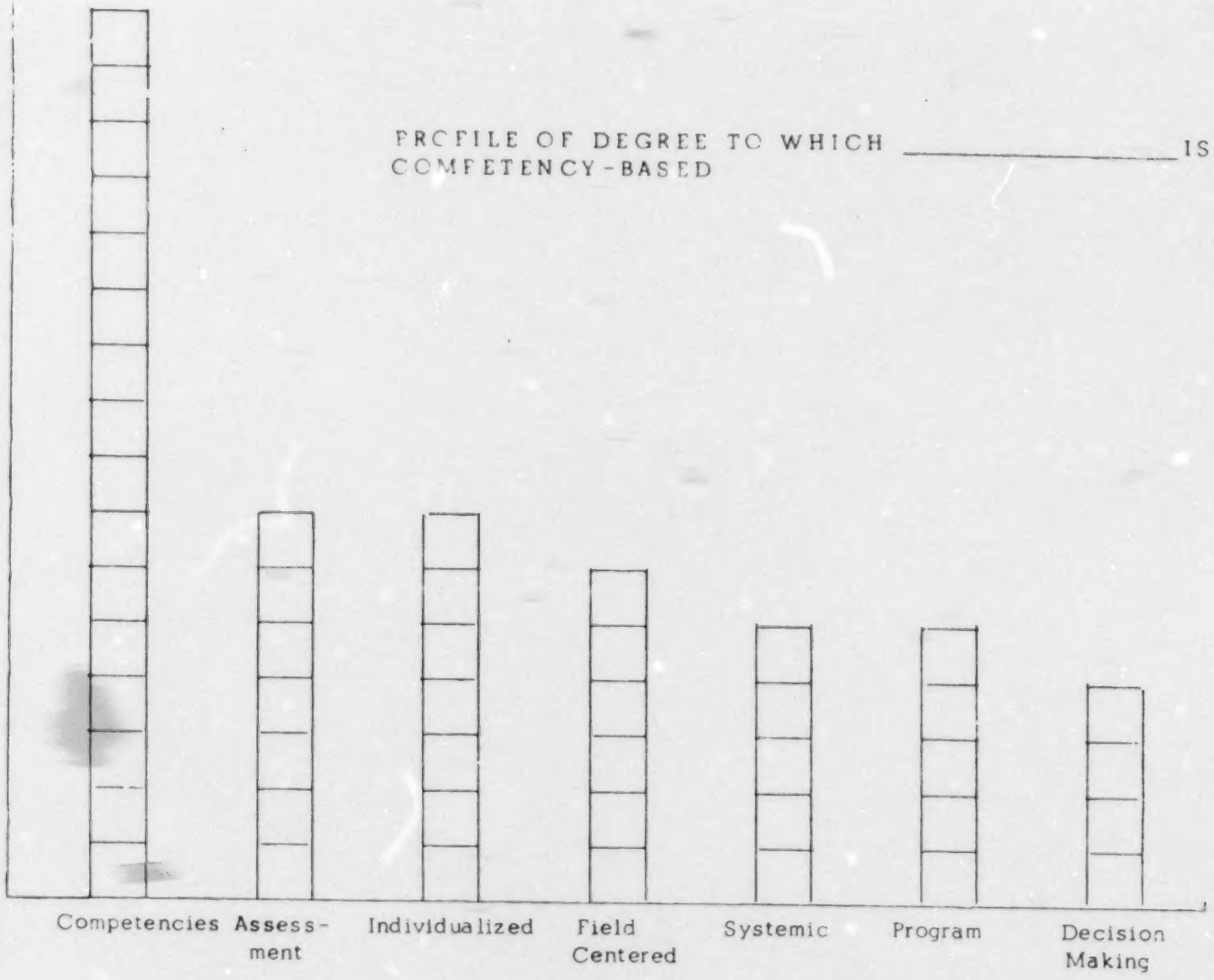
2) Broad-based decision making, groups involved are represented in policy decisions.

3) Student participation in decision-making.

4) Consortium is organized.

The factors which apply to a particular program are checked, and the total number of factors in each component are indicated on the profile. The profile form is shown in figure one.

PROFILE OF DEGREE TO WHICH _____ IS COMPETENCY-BASED



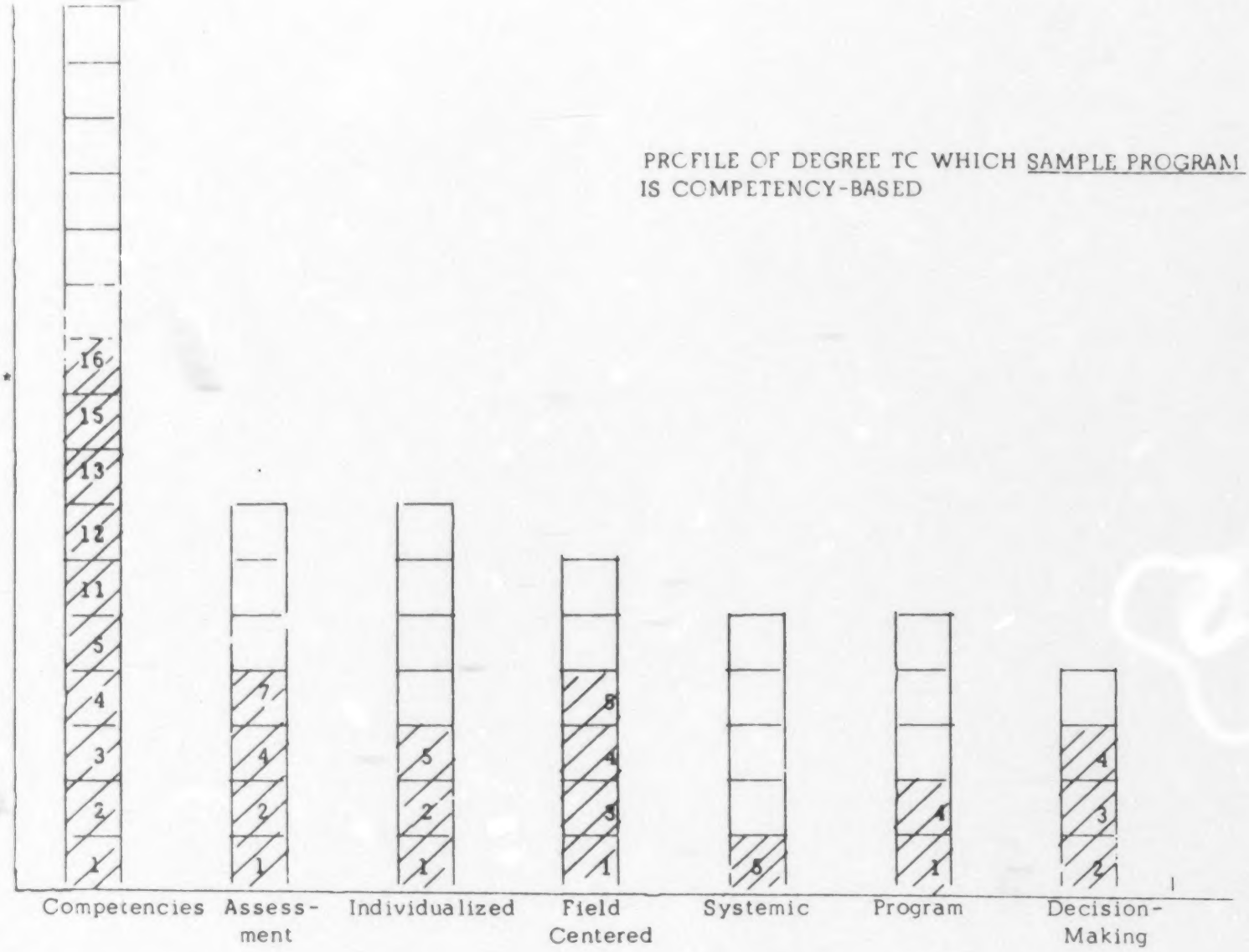
(figure 1)

Sample Program

As an example of how the profile works, consider a hypothetical institution which has matched its program with the factors. In terms of competencies, numbers 1*, 2*, 3, 4, 5, 11, 12, 13, 15, 16 apply. Since there are ten of these, the profile will indicate ten factors. Note that factors are merely totaled, with no sequencing and weighting of factors indicated. Under assessment, numbers 1*, 2, 4, 7 apply, hence, four factors are indicated. Eventually a total profile is constructed which provides an overview of the program. (figure 2).

These profiles can be used for descriptive and/or comparative purposes. Another function relates to the pros and cons of competency-based teacher education. Critics are often accused of building "straw men" which they methodically attack. By illustrating those factors which apply to a <u>particular</u> program, it is then reasonable to identify only those strengths and weaknesses associated with particular elements as being applicable to that program. Thus, a much more realistic assessment and more meaningful discussion are possible. There may, of course, be aspects not covered by the profile which would be points of discussion, such as the teaching of theory. The profile does, however, provide a point of reference.

PROFILE OF DEGREE TO WHICH SAMPLE PROGRAM IS COMPETENCY-BASED



(figure 2)

Competency-Based Teacher Certification Definitions

#1. In defining performance-based teacher certification, it is useful to consider the two parts of the concept -- "performance-based" and "teacher certification" -- separately. Teacher certification is, of course, the process whereby a state or other governmental unit identifies those persons who are eligible for employment as teachers.

The "performance-based" part of the concept signifies that the collection of evidence verifying the candidate's ability to perform as a teacher is a central function in the bureaucratic process of teacher certification. The addition of "performance-based" as a qualifier to "teacher certification" specifies the kind of evidence which is most appropriate for identifying those persons who should be considered qualified to perform as teachers in public schools. Such evidence would relate directly to teaching performance.

Fred Daniel, Associate for Planning and Coordination. Performance-Based Teacher Certification: Florida's Projected Program. May 1971.

#2. Competency-Assessment Certification (CAC) -- The award of entry-level certification or licensure based upon a competency-assessment procedure which verifies the applicant's attainment of an established minimum level of teaching competency, by either

1) State Education Agency (SEA) - approved CBTE/PBTE

2) A competency-assessment process designed and conducted by the SEA.

(NOTE: Procedures of school districts, preparing institutions, or state educational agencies -- acting separately or cooperatively -- which (sic) permit entry of certain classes of persons (e.g.: those holding earned degrees in non-education fields, etc.) to teach or perform other school staff support services on a probationary status. If during this period such persons are rated in some overall performance manner for the purpose of awarding continuing professional certification or licensure, such process has not been defined as competency-assessment certification. Such procedures do not verify specific competencies in advance of initial entry into, and employment within, the education professions.)

Pennsylvania Department of Education. "Competency-Based Teacher Certification in the United States," (Harrisburg: 1973.) pp. 1,2.

Synthesis of Competency-Based Teacher Certification Definitions

The various state approaches to competency-based teacher education/certification can be viewed as being along a continuum (figure 3) and reflect the role of a state in the process. At one end of the continuum we have a very open system with considerable flexibility, whereas at the other end we have a highly structured and centralized approach. Easily identifiable state positions have been labeled on the diagram and will be briefly described, but it is important to remember that a continuum implies varying degrees of program types between those identified. A more complete description of the models, a discussion of the issues related to these, and examples, can be found in The Role of the State in Competency-Based Teacher Education by Robert A. Roth.

Informational Model

Decision-making is decentralized with local districts conducting the evaluation of the competence of potential teachers. The function of the state is to monitor the local evaluation but not impose standards. The state office would maintain a data bank on all teaching personnel.

Process Model

In this system the state does not determine the content of the teacher education program. Competencies and performance criteria are not established at the state level. The primary role of the state is to define the process for development of teacher education programs, stating who is to be involved and the nature of the involvement.

Alternative Program Model

In this system the state provides that institutions may develop competency-based teacher education programs. Alternative structures are available to the teacher preparation institutions, but all programs are approved by the state. Many states are operating under this approach, some merely because existing regulations provide for experimental programs.

#3. Competency-Based Teacher Certification -- The Name of What Game?

Competency (performance)-based teacher certification (CBTC) has been interpreted in several ways. In the following descriptions, the term competency-based teacher education is not defined. Any of the previous definitions of CBTE which apply to a particular situation or state may be substituted for the term CBTE.

Preservice

1) An agency of the state (e.g., Department of Education, testing center, commissioned committees) external to the teacher education program evaluates a candidate for certification. This is the strict interpretation of the term.

2) The state has adopted a set of competencies required of all candidates and hence as part of all teacher education programs. The preparation institutions verify attainment of competencies. This is in the "gray" area between CBTE and CBTC.

3) The state approves competency (performance) -based teacher education (CBTE) programs (defined in various ways) so that certificates will be issued upon the recommendation of the institution. Competency programs may or may not be mandated. This is a very loose interpretation of the term and generally is considered more CBTE than CBTC. Some would classify only a mandated CBTE system as CBTC.

Inservice

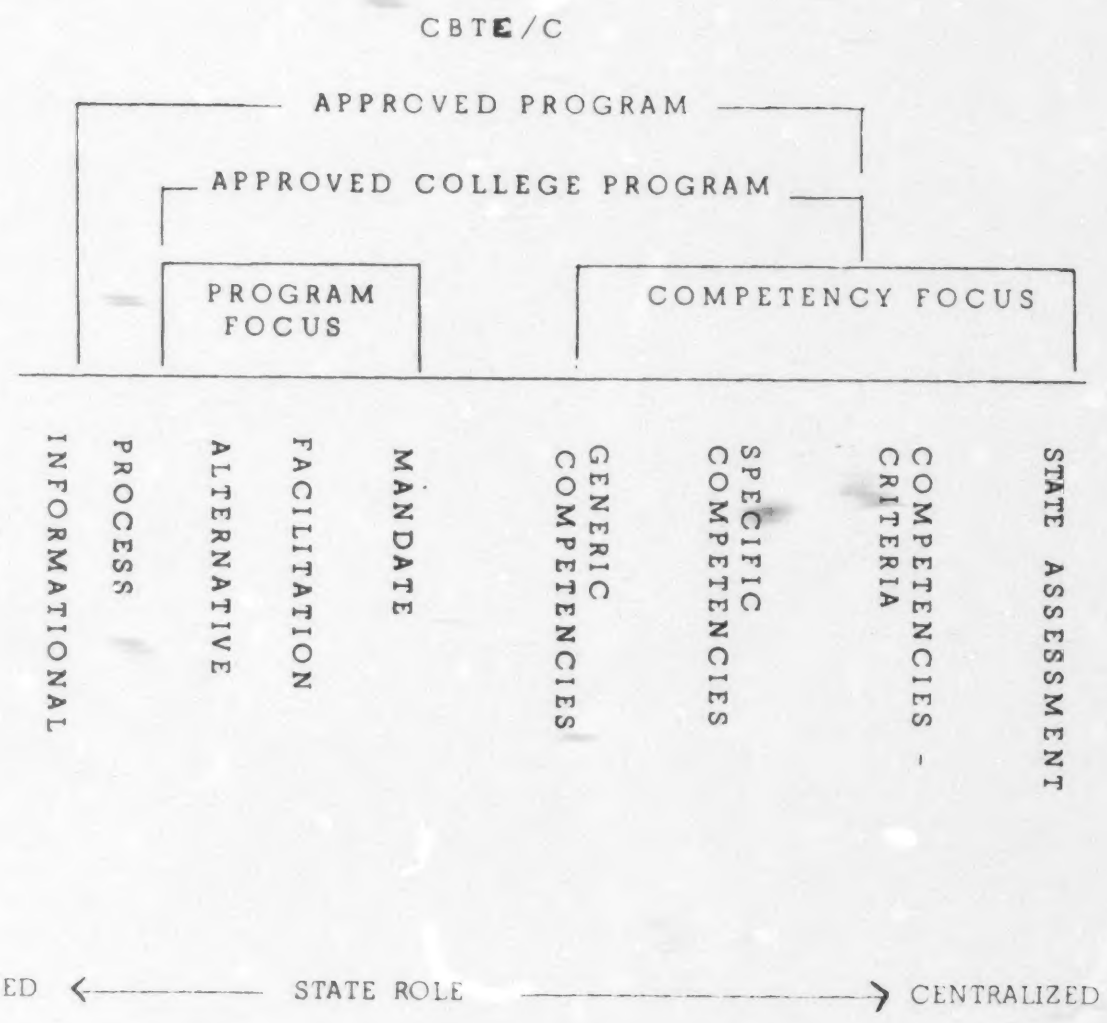
1) An agency of the state (e.g., Department of Education, testing center, commissioned committees) external to the school district evaluates a candidate for re-certification.

2) The state has adopted a set of competencies required of all re-certification candidates. Local districts using their own staff (or combined with outside personnel) evaluate the candidate and recommend for re-certification on the basis of these competencies.

3) The state requires an inservice evaluation for re-certification and either requires or accepts an evaluation system consistent with the principles of the competency-based approach (variously defined). Some would classify only a mandated system as CBTC.

Robert A. Roth, Michigan Department of Education. January 1974.

STATE APPROACHES



(figure 3)

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Facilitation Model

As in the alternative program model, the institutions are free to select their program structure, and the college approved program approach is utilized. The essential difference is that the state actively supports competency-based programs through a number of facilitating activities. The main theme in this approach is to encourage development of programs but to maintain this on a voluntary basis due to the lack of definitive information on program effectiveness.

Mandate Model

In this case, all of the previous model's components apply, except that the teacher preparation institution must develop competency-based teacher education programs. Some of the options have now been closed, but only in terms of program structure. Implicit in this system is a deep commitment to CBTE and faith in its value.

Generic Competencies Model

A general approach to competency-based teacher education-certification is to establish required competencies at the state level. The manner in which these competencies are stated significantly affects the impact they will have on teacher education programs and the role of the state. The competencies can be stated in generic (broad) terms which then serve as guidelines for further specification by teacher preparation institutions.

Specific Competencies Model

In this system the state provides very specific competencies which are utilized by the colleges or preparation units as program objectives. Uniformity in certification with a single set of standards is the essential feature.

Competencies Criteria Model

A model which at times is indistinguishable from the previous one is characterized not only by state adoption of specific competencies but the criterion levels for these as well. Criterion levels specify the evidence that will be accepted that a competency has been demonstrated.

State Assessment Model

In this paradigm specific competencies and criteria are established at the state level, but the assessment of an individual's competence is done by the state. There are several ways in which a state testing procedure can be implemented.

Figure three illustrates the various models described. The titles "approved program" and "approved college program" were added to the continuum by Ted Andrews, with the New York State Department of Education.

A significant question is which of these models are considered competency-based teacher education, and which are considered competency-based teacher certification. Where does one draw the line? It is suggested that the farther to the right one goes on the continuum, the more the approach is considered competency-based teacher certification. The informational, process, alternative and facilitation models probably would not be considered certification, but the state assessment model certainly is. Classification of the models between these would be a matter of preference.